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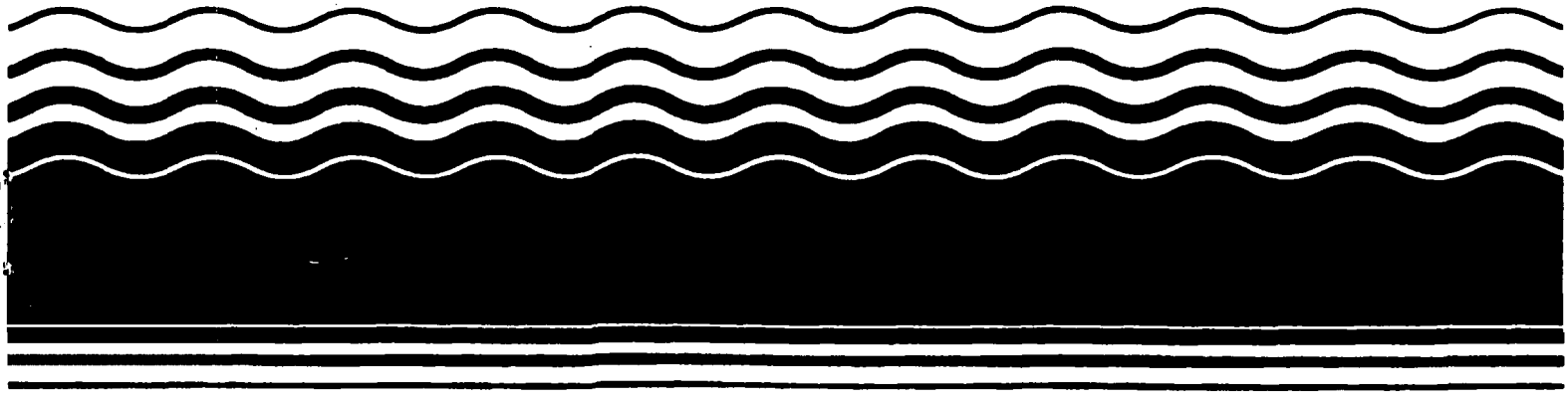
March 1999

EPA Superfund
Explanation of Significant Difference for the Record of Decision:

North Penn - Area 1
Souderton, PA
10/29/1997



EXPLANATION OF SIGNIFICANT DIFFERENCES
NORTH PENN AREA 1 SUPERFUND SITE

I. INTRODUCTION

Site Name: North Penn Area 1 Superfund Site

Site Location: Souderton, Montgomery County, Pennsylvania

Lead Agency: U.S. Environmental Protection Agency, Region III ("EPA" or "the Agency")

Support Agency: Pennsylvania Department of Environmental Protection ("PADEP")

Statement of Purpose

A Record of Decision ("ROD") for the North Penn Area 1 was signed on September 30, 1994. This ROD addresses primarily contamination of soil, but also includes an interim action to address ground water contamination. This Explanation of Significant Differences ("ESD") is issued in accordance with Section 117 of the Comprehensive Environmental Response, Compensation and Liability Act, as amended, ("CERCLA"), 42 U.S.C. § 9617(c), and 40 C.F.R. § 300.435(c)(2)(I). This ESD has been prepared to provide the public with an explanation of the nature of the change made to the selected interim action for contaminated ground water, and to demonstrate that the revised remedy complies with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621. The selected remedy for contaminated soil remains unchanged.

II. SUMMARY OF THE SITE HISTORY AND SELECTED REMEDY

The North Penn Area 1 Site is located in Souderton, Montgomery County, Pennsylvania, and is one of 12 Sites identified in the North Penn area on the basis of contamination of ground water by volatile organic compounds ("VOCs") in production wells. The contamination at the Area 1 Site was first noted in 1979 in North Penn Water Authority (NPWA) well S-9. The well was immediately taken out of service because tetrachloroethylene levels in the range of 10-13 ppb were found in the ground water. (Tetrachloroethylene is also known as perchloroethene, which is abbreviated as PCE. The term PCE will be used in this document when referring to this compound.) On the basis of this contamination, the site was proposed for the National Priorities List ("NPL") in January 1987, and was placed on the NPL in March 1989.

After the contamination was identified, Potentially Responsible Party (PRP) searches by EPA identified five facilities in the area that may have contributed to the ground water contamination. These facilities and the ground water contamination were evaluated in the Remedial Investigation/

Feasibility Study ("RI/FS"). The results of the sampling work done during the RI/FS revealed contamination at three of the five properties. On September 30, 1994, EPA issued a ROD which included the remedial action for contaminated soil and an interim action for contaminated ground water. The selected remedy for the contaminated soil was excavation and offsite disposal of contaminated soil at the three properties of concern (Granite Knitting Mills ("GKM"), Gentle Cleaners, and Parkside Apartments). For the contaminated ground water, the interim action selected was pumping and treating of the upper interval of the GKM well and the entire well S-9. However, the ROD indicates that one option that may be pursued is the direct discharge of the extracted water to the sewage treatment plant since the ground water had low levels of contamination.

As part of the remedial design, soil sampling was conducted in November 1995 at the three properties of concern to determine the volume of soil that would need to be removed. Levels of contamination in soils at the Parkside Apartments property were below the remediation goals established in the ROD. Therefore, excavation of soils is not planned at this property, only at the Granite Knitting Mills and the Gentle Cleaners property. It is important to note that the Parkside Apartments is the most downgradient of the three properties of concern and down gradient from well S-9. Also, as part of the remedial design activities, three new wells were installed and sampled (See attached map). Well S-9 was also sampled at that time. One of the new wells was located adjacent to the GKM property, the second well was located between the GKM property and well S-9, and the third well was located downgradient from well S-9. Results from the four wells which were sampled showed that the highest level of contamination was found in the well adjacent to the GKM property (NPA1-S1) with 32 ppb of PCE, 10 ppb of 1,2 Dichloroethene, and 5 ppb of 1,1,1-Trichloroethane. The well between the GKM property and S-9, well NPA1-S2, and well S-9 each had 6 ppb of PCE, and the well downgradient of S-9 (NPA1-D3) had no detectable levels of contamination.

III DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR THOSE DIFFERENCES

EPA has determined that a change in the interim remedy selected in the ROD is warranted. The selected remedy for contaminated soil basically remains unchanged. Although soil at the Parkside Apartments will not be excavated, this is not a significant change since the levels of contamination found during the remedial design field sampling are below the cleanup goals established in the ROD. For the ground water interim remedy, ground water will be discharged to a POTW instead of treating it with an air stripper. Sampling results from the remedial design activities revealed low levels of contamination which can be handled by the POTW. This is not a significant change since the ROD established that this was an option that will be considered

in the remedial design. However, EPA has determined that extraction of ground water from well S-9 is not necessary, but is still required at the GKM well. This change is a significant change as defined in 40 C.F.R. §300.435(c)(2)(I), the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), therefore, preparation of this ESD is required. A ROD Amendment is not required because the changes reflect revision in the underlying applicable or relevant and appropriate requirements ("ARARs"). The overall goal of the remedy is the same, that is; to eliminate the potential exposure risk from the contaminated soil, to eliminate the source of contamination migrating to ground water, and to prevent the spread of contaminated ground water.

The ROD issued for the Site on September 30, 1994 selected, as an interim action for the ground water, pumping and treating of the upper interval at the GKM well and the entire S-9 well. The ROD established that the extraction/treatment system shall be operated until the ground water is cleaned up to background levels. This requirement was based on the Pennsylvania requirement that contaminated ground water be cleaned up to background levels, i.e., those levels of each contaminant that would be found in the area in the absence of a source of contamination (the Site). According to the ROD, the background concentration for each contaminant of concern for the Site shall be established by EPA during the Remedial Design.

Subsequent to the issuance of the ROD, the Commonwealth of Pennsylvania signed into law the Land Recycling and Remediation Standards Act (ACT 2 of 1995). The Commonwealth of Pennsylvania, Department of Environmental Protection has identified Act 2 as an ARAR. EPA has determined that Act 2 does not, under the circumstances at the Site, impose any requirements that are more stringent than the federal standards. Based on this change in Pennsylvania's remediation standards, EPA has determined that for this Site, Maximum Contaminant Levels ("MCL") will be used instead of the background levels. The MCLs (which are health based levels) are the maximum permissible concentrations of a chemical in drinking water as established in the Safe Drinking Water Act. The MCL for TCE is 5 ppb. Also, EPA has determined that pumping of well S-9 is not necessary since the levels of contamination (PCE) detected in that well are expected to be below the MCL.

During the RI/FS sampling activities the highest detection for PCE in well S-9 was 5 ppb. Sampling conducted again during the remedial design sampling activities showed 6 ppb. Although the level during the remedial design sampling activities was 1 ppb higher than the level detected during the RI/FS activities, the result from a single sample may not be statistically significantly different than previous results. In fact, contaminated soil from the two properties upgradient, which is the source of ground water contamination, will be excavated and disposed offsite. Therefore, the levels of PCE are not expected

to increase in the future. Furthermore, one of the new wells installed during the remedial design sampling activities which is located 500 ft downgradient from well S-9, revealed no contamination. EPA will monitor the levels of contamination in well S-9 by conducting periodic sampling using the monitoring program established in the ROD which requires sampling and analysis of the downgradient monitoring wells (NPA1-S1, NPA1-S2, and NPA1-D3), the GKM and S-9 wells. The monitoring program in the ROD was designed based on achievement of background concentrations. Since operation of the extraction system now will be based on MCLs, the monitoring program will be based on MCLs instead of background concentrations. According to the ROD, the data collected as part of the long term monitoring program, will be used to evaluate the effectiveness of the extraction system. The data will be evaluated to determine whether or not the interim ground water extraction system is sufficient to remediate the contamination in the entire plume area. This determination will be made as part of the final action for this operable unit.

There will be no impacts in the remedial design if well S-9 is not included in the extraction and discharge system since the connection for the GKM well is independent from the connection for well S-9. Also, there will be some savings associated with the equipment, installation, and operation and maintenance of the extraction system at well S-9.

IV PUBLIC PARTICIPATION

The ESD and the information upon which it is based will be included in the Administrative Record file and the information repository for this Site. The Administrative Record is available for public review at the locations listed below:

U.S. EPA Region III
841 Chestnut Building
Philadelphia, PA 19107
Hours: Monday - Friday, 9:00 a.m. - 4:00 p.m.

Indian Valley Public Library
100 East Church Avenue
Telford, PA 18969
215-723-9109

V. SUPPORT AGENCY COMMENTS

EPA has notified the PADEP of the changes proposed in this ESD in accordance with 40 C.F.R. 300.435(c)(2). By letter dated March 25, 1997 from Carol R. Collier, PADEP Southeast Office Regional Director, to Mr. W. Michael McCabe, EPA Regional

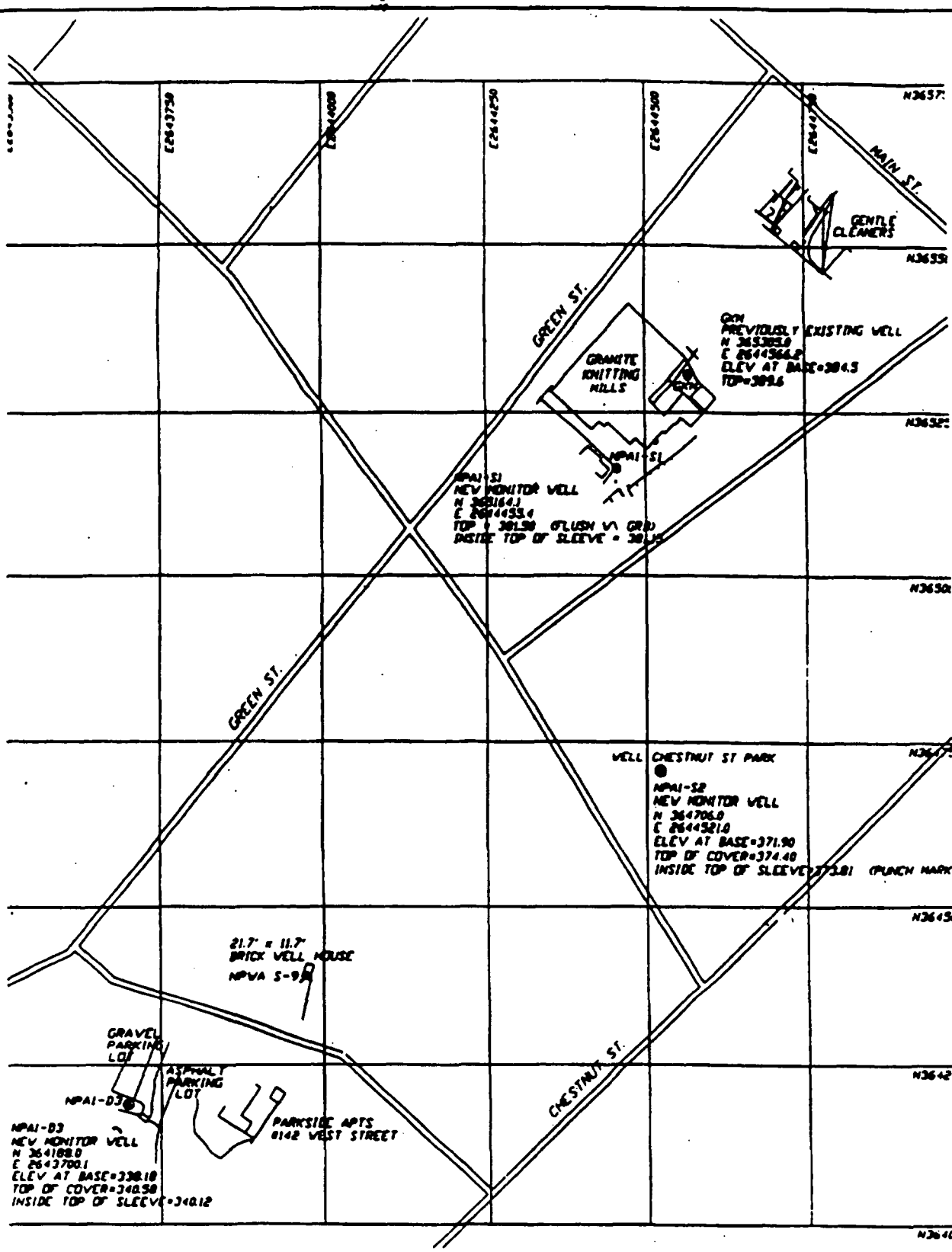
Administrator, PADEP informed EPA that it concurs with this ESD.

VI. AFFIRMATION OF THE STATUTORY DETERMINATIONS

EPA has determined that the revised remedy complies with the statutory requirements of CERCLA 121, 42. U.S.C. 9621. Considering the new information that has been developed and the changes that have been made to the selected remedy, EPA believes that the remedy remains protective of human health and the environment, and complies with Section 121(d) of CERCLA, 42 U.S.C. 9621 (d) and EPA's off-Site Policy and is cost-effective. In addition, the revised remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for this Site.

10/29/97
Date

Abraham Ferdas, Acting Director
Hazardous Waste Management Division



DETAILED SITE MAP
NORTH PENN AREA I

DYNAMAC

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